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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,321	04/16/2004	Christian Marty	251928US41	7891

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

NGAMPA, BRIGET P

ART UNIT	PAPER NUMBER
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1762

NOTIFICATION DATE	DELIVERY MODE
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09/24/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/825,321

Applicant(s)

MARTY ET AL.

Examiner

Briget P. Ngampa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/21/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, drawn to method, classified in class 427, subclass 119.
 - II. Claims 6-8, drawn to product, classified in class 106, subclass 14.15.
2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product (claims 6-8) as claimed can be used to make a coating for semiconductor, which is a materially different process that is require by the method.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

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(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable

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over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. A telephone call was made to attorney Philipe Signore on 6/27/2007 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 4/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rossi et al. (patent number 4,664,969 hereafter '969), in view of Bolt et al. (patent number 5,807,798, hereafter '798) further in view of Bell et al. (patent number 7,138,084 B2 hereafter '084).

With respect to claim 1 and 4/1, '969 teach a method of coating a surface with refractory material [col 2, line 43-45]. The refractory coating is made of alumina with binder [abst.]. Specifically, the binder is made of 50% aluminum chloride and 50% water solution [col 6, example 4, lines 53-54]. '969 further teach that the solution is applied by air pressure from a pneumatic apparatus (air brush) [fig 1, spraying apparatus (14)], follow by a drying step [example 4, line 61] and sintering to a temperature of up to 2400°F for 7.5 hours [example 4, lines 62-64].

'969 do not specifically teach the refractory material being applied to a mullite container, nor does it teach alumina being flour.

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'798 teach a refractory filler and binder material applied to the surface of a refractory container made mainly of mullite [col 1, line 54-58] and the filler has been subjected preliminary milling before mixing [col 5, line 57-60]. Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have applied the coating the '969 on the mullite container of '798 with reasonable expectation of success because '969 teaches that it is a suitable method.

'969 and '798 do not teach firing in an oxidizing atmosphere.

'084 teach firing of the container in an atmosphere where a supply air is passed [col 11, line 35-36]. It would have been obvious to one of ordinary skills in the art at the time the invention was made to have added air during sintering to form a stable coating because, '084 teaches that adding air during sintering is a suitable method.

3. Claims 2-3, 4/2 and 4/3/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Rossi et al. (patent number 4,664,969 hereafter '969) in view of Bolt et al (patent number 5,807,798, hereafter '798), further in view of Bell et al. (patent number 7,138,084 B2 hereafter '084) further in view of Mills (patent number 5,143,777, hereafter '777).

With respect to claims 2 and 3, '969, '798 and '084 teach the limitation of claim 1. They do not teach that the coating also comprises a water-soluble organic dye methylene blue in a total proportion of 0.1% to 0.5% by weight. '777 teach that methylene blue dye in a coating reveals no cracks [col 4, line 5-6]. It would have been obvious to one of ordinary skills in the art at the time of the invention to have added

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methylen blue dye to reveal no cracks because '777 teaches that it is a suitable method.

With respect to the proportion of 0.1% to 0.5%, such small proportions are considered trace amounts routinely in experimentation. Therefore it is prima facie obvious not to optimize them as result effective variable.

4. Claim 5/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rossi et al. (patent number 4,664,969 hereafter '969), in view of Bolt et al (patent number 5,807,798, hereafter '798), further in view of Bell et al. (patent number 7,138,084 B2 hereafter '084) as applied to claim 1, and further in view of Tawil et al (patent number 5,725,955, hereafter '955).

With respect to claim 5, '084 further teaches 55-70% Al_2O_3 [col 3, line 24] filler and 30-45% binder [col 3, line 24]. '084 do not teach application by brush. '955 teach a suspension containing alumina is applied by brush [abst]. It would have been obvious to one of ordinary skills in the art at the time the invention was made to have used a brush to apply a slurry to a surface because '955 teaches that it is a suitable method.

With respect to claims 5/2 and 5/3 are rejected over Rossi ('969), Bolt ('798), Bell ('084) and Mills ('777) as applied to claims 2 and 3 and further in view of Tawil for the same reason stated immediately above.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Briget P. Ngampa whose telephone number is 571-270-1866. The examiner can normally be reached on M-F, 830-4:30PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bpn



MICHAEL B. CLEVELAND
SUPERVISORY PATENT EXAMINER